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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/868,090	06/14/2001	Johann Walter Grond,	GROND-2 PCT	5638

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Collard & Roe
1077 Northern Boulevard
Roslyn, NY 11576

EXAMINER

FOX, CHARLES A

ART UNIT	PAPER NUMBER
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3652

DATE MAILED: 09/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/868,090

Applicant(s)

GROND, JOHANN WALTER

Examiner

Charles A. Fox

Art Unit

3652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-23, 25-29, 31 and 33-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-23, 25-28, 31 and 33-36 is/are rejected.
- 7) ☒ Claim(s) 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 12. 6) ☐ Other: _____

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 21-23, 25, 26 and 33-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Lubbers et al. In regards to claim 21 Lubbers et al. US 4,007,843 discloses a method of storing loads in racks comprising matrices along a plurality of aisles, comprising the steps of:

transporting a load via a transport device in a first horizontal direction along a track that extends along the front of a plurality of rack bays to a vertical conveyor;

depositing said load on vertical conveyor;

transporting load in a vertical direction to a target rack level;

removing the load via a lifting and pushing device on a transport device into one of a plurality of rack aisles;

transporting the load in a second horizontal direction via said transport device along guide members in said aisle;

transporting said load in a third horizontal direction from said rack aisle into said target rack compartment via said transport device which is capable of lifting said load over a small distance;

depositing said load into said target rack compartment.

In regards to claim 22 Lubbers et al. disclose reversing the steps presented in the rejection of claim 21 to retrieve a load from said target rack compartment.

In regards to claim 23 all steps outlined in the rejection of claim 21 have a direction that forms an angle of 90° with the direction of the previous step.

In regards to claims 35 and 25 Lubbers et al. disclose a storage system for loading and unloading loads in a rack warehouse comprising:

- a plurality of rack bays, with a plurality of rack levels and each level having a plurality of compartments;

- a loading track (712) running along the front of said bays;

- a plurality of aisles disposed between said bays;

- a plurality of guide elements provided on said load track and in said plurality of aisles;

- movable transport devices (200) provided on said loading track and in said aisles, suitable for receiving loads;

- vertical conveyors (100a-c) located at the front of said rack bays;

- a lifting pushing system for displacing the loads into and out of said rack compartments and said vertical conveyor;

- wherein the system has a lower zone and is provided with said transport devices.

In regards to claim 26 Lubbers also discloses that the lifting conveyors (100a-c) lifts the loads to said guiding elements in said aisles.

In regards to claim 33 Lubbers further discloses the lower zone of the transport devices has wheels (270) and a lifting system (245) for raising loads against their weight that acts on the floor of the transport device.

In regards to claim 34 Lubbers also discloses that the transport device comprises a plurality of lifting bars (240) for raising a load wherein said bars are disposed adjacent to said running wheels.

In regards to claim 36 Lubbers et al. US 4,007,843 discloses a method of storing loads in racks comprising matrices along a plurality of aisles, comprising the steps of:

transporting a load via a transport device in a first horizontal direction along a track that extends along the front of a plurality of rack bays to a vertical conveyor;

depositing said load on vertical conveyor;

transporting load in a vertical direction to a target rack level;

removing the load via a lifting and pushing device on a transport device into one of a plurality of rack aisles;

transporting the load in a second horizontal direction via said transport device along guide members in said aisle;

transporting said load in a third horizontal direction from said rack isle into said target rack compartment via said transport device which is capable of lifting said load over a small distance;

depositing said load into said target rack compartment;

holding said vertical conveyors in a waiting position so that said transport devices can drive on said loading track without obstruction to a desired vertical conveyor.

See column 7 lines 35-54.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 27,28 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lubbers et al. as in claim 35 and in view of Burt. In regards to claims 27 and 28 Lubbers et al. teaches the limitations of claim 35 as above, they also teach the plurality of guide members as being integrated into the rack bays. Lubbers et al. do not teach transverse supports between the rack bays or pulling systems driving said vertical conveyors. Burt US 4,428,708 teaches a system comprising:

a plurality of rack bays with a transverse support (43) connecting the plurality of rack bays;

a pulling system for moving the vertical conveyor. See figure 2 It would have been obvious to one of ordinary skill in the art, at the time of invention to provide the transverse supports and pulling system taught by Burt to the system taught by Lubbers et al. in order to rigidify the overall structure and move the load vertically in a manner that does not jolt the load.

In regards to claim 31 Burt further teaches that the running wheels of the transport devices (200) are adapted to the shape of the guide members they roll upon.

Response to Amendment

The amendments to the claims filed on June 27, 2003 have been entered into the record.

Allowable Subject Matter

Claim 29 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The closest prior art of Lubbers et al. or Burt do not teach or suggest connecting two transport devices together in a rack aisle.

Response to Arguments

Applicant's arguments filed June 27, 2003 have been fully considered but they are not persuasive. In regards to the two arguments against the rejections of claim 21 the cited prior art of Lubbers et al. does anticipated the instant invention. In regards to the first argument the lifting/pushing device (200) disclosed by Lubbers et al. does deposit the load onto the vertical lifting conveyor via a lifting/pushing device as claimed in the instant invention. In regards to the placement of the vertical conveyor during lifting of the load the Lubbers et al. vertical conveyor can be in front of any given rack bay when it is raised. Furthermore the instant invention teaches raising the load intended for a particular rack bay by one of two vertical conveyors on either side of an aisle. Thus the front of a rack bay must include two separate rows of racks as well as an aisle between the rows in order to operate as claimed. Therefore the aisle forms a


part of the front of a rack bay, and a vertical conveyor placed there is clearly anticipated by Lubbers et al.

The arguments for claim 25 have been addressed as stated above in the rebuttal of arguments for claim 21.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles A. Fox whose telephone number is 703-605-4294. The examiner can normally be reached between 7:00-5:00 Monday, Tuesday, Thursday and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached at 703-308-3248. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.



EILEEN D. LILLIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

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CAF
9-16-03